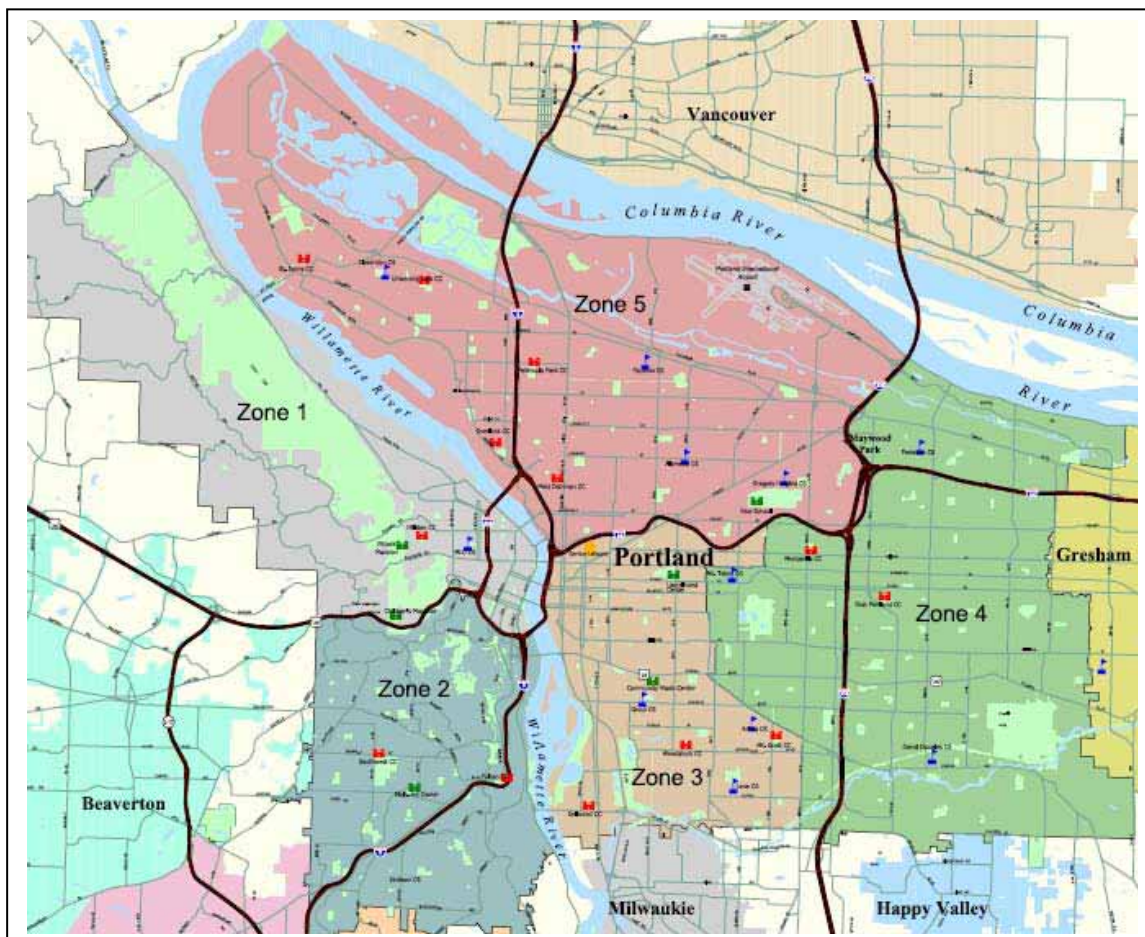




PORTLAND PARKS & RECREATION

Healthy Parks, Healthy Portland



Feasibility Study
**Development of Service
Zones
Facilities**



October 2006



Portland Parks & Recreation

Feasibility Study for the Development of Service Zones Facilities

Prepared for
Mayor Tom Potter
and the
Portland City Council

Prepared by
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October 2006

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PART 1 - EXECUTIVE SUMMARY

BACKGROUND

At the conclusion of the Portland City Council's 2006-2007 Fiscal Year budget adoption, the Council included a Budget Note for Portland Parks and Recreation (PP&R) to implement a Maintenance Facility Plan in order to address the inadequacy of current facilities to meet service delivery needs of the Bureau.

The General Fund Contingency will include \$650,000 for the Parks maintenance facility. To be eligible for the funds Parks must submit to the City Council for consideration a final Maintenance Facility Plan showing site acquisition and facility construction requirements..."

----- City of Portland, Oregon - FY 2006-07 Adopted Budget - Budget Notes, Volume 1, Page 66 (repeated page 204)

PP&R currently operates parks maintenance functions in many locations throughout the city. The primary maintenance delivery system is comprised of the Central Facility, five (5) Service Zones, City Nature North and City Nature South. These facilities are functionally-outdated, inadequately sized, some have serious deferred maintenance issues, and are not always located in a place that provides for efficient service delivery. The goal of this study was to determine what facilities the Bureau needs and where such facilities should be located. Potential properties were evaluated based on geographic location, ownership, size and accessibility.



Figure 1: Portland Parks and Recreation Service Zones

● Central facility at Mt Tabor Yard

● Service Zone Locations

GENERAL

Each of the following existing sites presents a different set of opportunities and challenges:

Central Facility – Mt. Tabor: Houses city-wide support functions for the service zones, and a portion of City Nature South. The photo below shows the area defined as Mt. Tabor Yard. Most of the buildings at this site are in very poor to poor condition, most of which should be demolished. The site, if utilized by PP&R, would yield up to 8.50 acres



Figure 2: Mt Tabor Yard Ariel Photograph

Zone 1 – Washington Park: This site is owned by PP&R; the current building was built in 1996, is in “good” condition and conveniently located. It should logically remain at Washington Park.

Zone 2 – Gabriel Park: The site is owned by PP&R. The site and building are too small and the building is in poor condition, but the site is conveniently located. This Zone could remain at Gabriel Park by demolishing the existing building and utilizing the existing land. The addition of an adjacent property is recommended.

Zone 3 – McLoughlin Boulevard: The facility, which is leased by PP&R, has more than adequate building area, but insufficient site area and is not centrally located. To accommodate the future growth either additional adjacent land or another site should be acquired for site operational needs or consolidation space for City Nature South.

Zone 4 – SE 136th Avenue: The site is owned by PP&R. It is adjacent to a single family development and has potential market value that might warrant disposal as a source of revenue for another location.



Figure 3: Zone 5 North and City Nature North

Zone 5 – East Delta Park (North) and NE 21st & Pacific (South): Zone 5 is currently split between two sites, both are owned by PP&R. Functionally consolidating these into one facility offers the potential for management efficiencies and reducing redundant building and site spaces. If a large enough site were purchased, Service Zone 5 could be combined with the Central Facility.

City Nature North – Delta Park: The vehicle & shop facility is a century-old barn (shown below). It is in very “poor” condition and should be demolished. The site may become unusable if a proposed widening of Interstate 5 is pursued. City Nature North could be combined with Service Zone 5, if a site large enough was acquired.



Figure 4: Urban Forestry Barn at East Delta

City Nature South – Mt. Tabor and McLoughlin: City Nature South is based out of the Mt. Tabor and McLoughlin facilities. To accommodate growth additional adjacent land or another site should be acquired.



Figure 5: City Nature South at Mt Tabor Yard



Figure 6: City Nature South in Trailer on McLoughlin

Community Gardens: Currently a part of the Mount Tabor facility, this entity oversees the operation of a number of public gardens throughout the City. It has been determined that this entity would not continue to be located with the Central Facility. A more central, visible, and public transit accessible location will need to be found.



Figure 7: Community Gardens Building



Figure 8: Community Gardens Building

EVALUATION

A key issue for the development of a new Central and Service Zone facilities is the availability of adequate property within the City, or near the boundaries of adjacent cities such as Gresham, Beaverton or Milwaukie. PP&R, through Waterleaf Architecture, retained GVA Kidder Mathews (GVA) to perform an extensive search for potential sites, including both undeveloped land and properties with existing buildings. Viable properties were scarce, especially those large enough to house the Central Facility. Essentially all available undeveloped land is located east of the Portland International Airport, or in the Rivergate area in Northwest Portland. Based on the property information collected, different options for renovation and relocation of the various existing sites were developed and evaluated under the established criteria.

RECOMMENDATIONS

Refer to the Project Options and Consolidations on Page 5. Portland Parks and Recreation and the consultant team analyzed six viable options. Options #5 or #6 are recommended as they provide the best scenario to accommodate current and future service delivery needs.

OPTION #5

General: The major part of this option is that the Central Facility, currently located at Mt Tabor, would be relocated to a new site. This option also condenses the current eight facilities into five locations. Basically, it is a combination of existing service zone facilities along with acquisition of additional property for the Central Facility, Service Zone 5, and City Nature North. Following is a more detailed description and breakdown of the development costs:

Description

Central Facility + Service Zone 5 + City Nature North:

Central Facility: New Site

Service Zone 5: (Combined) East Delta Park and NE 21st and NE Pacific

City Nature North (Relocation due to likelihood of I-5 Columbia River Crossing & ROW Increase)

Service Zone 4:

Remains at Current Site at SE 136th Avenue (with option to move to Zone 4 site if no new property acquired at Zone 3 McLoughlin site)

Service Zone 3 + City Nature South:

Service Zone 3: Remains at McLoughlin Property

City Nature South: Remains at McLoughlin only with Property Acquisition + Remodeling otherwise, move to Zone 4 at SE 136th Avenue

** Leased Site with Option to Purchase*

Service Zone 2:

Remains at Gabriel Park + Expansion

Service Zone 1:

Remains at Washington + Expansion

Development Costs

Assumption: Central Facility at Mt. Tabor is relocated

Land Cost	\$ 5,679,000
Direct Construction Cost	20,350,000
Indirect Construction (Soft) Cost	9,157,500
Sub-Total	\$ 35,186,000
Other Costs	4,000,000 *
Total	\$ 39,186,000 **

* Mt. Tabor Haz-mat remediation, demolition, temporary facilities, relocation, inflation, and contingency

** The level of confidence in these cost estimates is low-moderate, given the preliminary level of investigations.

OPTION #6

General: This differs from Option #5 in that the Central Facility remains at Mt. Tabor and the property is redeveloped for a new Central Facility along with City Nature South. This option also condenses the current eight facilities into just six locations. Basically, it is a combination of existing service zone facilities along with acquisition of additional property for the Central Facility, Service Zone 5, and City Nature North. Following is a more detailed description and breakdown of the development costs:

Description

Central Facility + City Nature South:

Central Facility: Redeveloped Mt. Tabor Site

City Nature North:

Relocation to new site due to likelihood of I-5 Columbia River Crossing & ROW Increase

Service Zone 5:

North and South locations are combined and relocated to new site

Service Zone 4:

Remains at Current Site at SE 136th Avenue

Service Zone 3:

*Service Zone 3: Remains at McLoughlin Property**

City Nature South: Remains at McLoughlin if there is a Property Acquisition + Remodeling, otherwise, moves to Zone 4 at 136th Avenue

** Leased Site with Option to Purchase*

Service Zone 2:

Remains at Gabriel Park + Expansion

Service Zone 1:

Remains at Washington + Expansion

Development Costs

Assumption: Mt. Tabor is redeveloped for the Central Facility and City Nature South

Land Cost	\$ 2,698,000
Direct Construction Cost	22,990,000
Indirect Construction (Soft) Cost	10,345,500
Sub-Total	\$ 36,033,000
Other Costs	6,000,000 *
Total	\$ 42,033,500 **

* Mt. Tabor Haz-mat remediation, demolition, temporary facilities, relocation, inflation, and contingency

** The level of confidence in these cost estimates is low-moderate, given the preliminary level of investigations.

PROJECT OPTIONS AND CONSOLIDATIONS

	OPTION 1 8 LOCATIONS	OPTION 2 8 LOCATIONS	OPTION 3 6 LOCATIONS	OPTION 4 5 LOCATIONS	OPTION 5 5 LOCATIONS	OPTION 6 6 OR 7 LOCATIONS
	<ul style="list-style-type: none">No Property Acquisition.All entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.	<ul style="list-style-type: none">Same as Option 1, except for the following:Property acquisition and new building for Central Facility.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.	<ul style="list-style-type: none">Same as Option 2, except for the following:Property acquisition and new buildings for Central Facility and Service Zone 5 Combined.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.	<ul style="list-style-type: none">Same as Option 3, except for the following:Property acquisition and new buildings for Central Facility, Service Zone 5 (Combined), and City Nature North.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.	<ul style="list-style-type: none">Same as Option 4, except for the following:Service Zone 1 - New addition and remodeling.Service Zone 2 - Property acquisition and new addition.Service Zone 3 - Property acquisition and remodeling.Service Zone 4 - New addition and remodeling.	<ul style="list-style-type: none">Central Facility remains at Mt. Tabor with major construction.Service Zone 1 - New addition and remodelingService Zone 2 - Property acquisition and constructionService Zone 3 - Property acquisition and new additionService Zone 4 - New addition and remodelingService Zone 5 - Property acquisition and constructionCity Nature North - Property acquisition and developmentCity Nature South - Property acquisition and development. Combined with Service Zone 3.
	<div>CF</div> <div>CENTRAL FACILITY - MT. TABOR</div>	<div>CF</div> <div>CENTRAL FACILITY - NEW SITE</div>	<div>CF + SZ5 (Combined)</div> <div>CENTRAL FACILITY - NEW SITE SERVICE ZONE 5 (Combined)</div>	<div>CF + SZ5 + CNN</div> <div>CENTRAL FACILITY - NEW SITE SERVICE ZONE 5 (Combined) CITY NATURE NORTH <small>Relocate CNN due to I-5 ROW Increase</small></div>	<div>CF + SZ5 + CNN</div> <div>CENTRAL FACILITY - NEW SITE SERVICE ZONE 5 (Combined) CITY NATURE NORTH</div>	<div>CF + CNS</div> <div>CENTRAL FACILITY - MT. TABOR CITY NATURE SOUTH</div>
	<div>SZ5/N</div> <div>SERVICE ZONE 5 / NORTH - EAST DELTA</div>	<div>SZ5/N</div> <div>SERVICE ZONE 5 / NORTH - EAST DELTA</div>				
	<div>SZ5/S</div> <div>SERVICE ZONE 5 / SOUTH - NE 21st</div>	<div>SZ5/S</div> <div>SERVICE ZONE 5 / SOUTH - NE 21st</div>				<div>SZ5</div> <div>SERVICE ZONE 5 (Combined) <small>Possibly combined with City Nature North</small></div>
	<div>CNN</div> <div>CITY NATURE / NORTH - WEST DELTA</div>	<div>CNN</div> <div>CITY NATURE / NORTH - WEST DELTA</div>	<div>CNN</div> <div>CITY NATURE / NORTH - WEST DELTA</div>			<div>CNN</div> <div>CITY NATURE / NORTH - WEST DELTA <small>Possibly combined with Service Zone 5</small></div>
	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>	<div>SZ4</div> <div>SERVICE ZONE 4 - SE 136th AVENUE</div>
	<div>SZ3 + CNS (Leased Site)</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>	<div>SZ3 + CNS (Leased Site)</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>	<div>SZ3 + CNS (Leased Site)</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>	<div>SZ3 + CNS (Leased Site)</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>	<div>CNS + SZ3</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>	<div>CNS + SZ3</div> <div>CITY NATURE / SOUTH - McLOUGHLIN SERVICE ZONE 3 - McLOUGHLIN</div>
	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>	<div>SZ2</div> <div>SERVICE ZONE 2 - GABRIEL PARK</div>
	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>	<div>SZ1</div> <div>SERVICE ZONE 1 - WASHINGTON PARK</div>
LAND COST: (\$9 / SF)	0	3,136,464	3,724,551	4,312,638	5,678,638	2,698,000
CONSTRUCTION COST:	5,489,000	15,149,000	16,429,000	17,223,000	20,350,000	22,990,000
IN-DIRECT COST:	2,470,050	6,817,050	7,393,050	7,750,350	9,157,500	10,345,500
TOTAL COST:	\$7,959,050	\$25,102,514	\$27,546,601	\$29,285,988	\$35,186,138	\$36,033,500
					<small>Add \$4 million for relocation and other logistical costs</small> \$39,186,138	<small>Add \$6 million for relocation and other logistical costs</small> \$42,033,500
* Options 1 through 4 do not include operational logistics for any site moves or potential environmental remediation						

PROJECT OPTIONS AND CONSOLIDATIONS

	OPTION 1 8 LOCATIONS	OPTION 2 8 LOCATIONS	OPTION 3 6 LOCATIONS	OPTION 4 5 LOCATIONS	OPTION 5 5 LOCATIONS	OPTION 6 6 OR 7 LOCATIONS
	<div><ul style="list-style-type: none">No Property Acquisition.All entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.</div> <div><ul style="list-style-type: none">Same as Option 1, except for the following:<ul style="list-style-type: none">Property acquisition and new buildings for Central Facility.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.</div> <div><ul style="list-style-type: none">Same as Option 2, except for the following:<ul style="list-style-type: none">Property acquisition and new buildings for Central Facility and Service Zone 5 Combined.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.</div> <div><ul style="list-style-type: none">Same as Option 3, except for the following:<ul style="list-style-type: none">Property acquisition and new buildings for Central Facility, Service Zone 5 (Combined), and City Nature North.All other entities remain at current locations and are upgraded only to meet building, health, life safety, and energy code requirements.</div> <div><ul style="list-style-type: none">Same as Option 4, except for the following:<ul style="list-style-type: none">Service Zone 1 - New addition and remodeling.Service Zone 2 - Property acquisition and new addition.Service Zone 3 - Property acquisition and remodeling.Service Zone 4 - New addition and remodeling.</div> <div><ul style="list-style-type: none">Central Facility remains at Mt. Tabor with major construction.Service Zone 1 - New addition and remodelingService Zone 2 - Property acquisition and constructionService Zone 3 - Property acquisition and new additionService Zone 4 - New addition and remodelingService Zone 5 - Property acquisition and constructionCity Nature North - Property acquisition and developmentCity Nature South - Property acquisition and development. Combined with Service Zone 3.</div>					
LAND						
Central Facility	0	3,136,464	3,724,551	4,312,638	4,312,638	0
Service Zone 1	0	0	0	0	0	0
Service Zone 2	0	0	0	0	250,000	250,000
Service Zone 3	0	0	0	0	468,000	0
Service Zone 4	0	0	0	0	0	0
Service Zone 5	0	0	0	0	0	936,000
City Nature North	0	0	0	0	0	864,000
City Nature South	0	0	0	0	648,000	648,000
Total	\$0	\$3,136,464	\$3,724,551	\$4,312,638	\$5,678,638	\$2,698,000
CONSTRUCTION						
Central Facility	3,240,000	12,900,000	12,900,000	12,900,000	12,900,000	14,190,000
Service Zone 1	141,000	141,000	141,000	141,000	1,100,000	1,100,000
Service Zone 2	100,000	100,000	100,000	100,000	1,050,000	1,050,000
Service Zone 3	277,000	277,000	277,000	277,000	400,000	400,000
Service Zone 4	105,000	105,000	105,000	105,000	1,050,000	1,050,000
Service Zone 5	420000	420,000	1,700,000	1,700,000	1,700,000	1,700,000
City Nature North	956,000	956,000	1,750,000	1,750,000	1,750,000	1,750,000
City Nature South	250,000	250,000	250,000	250,000	400,000	1,750,000
Total	\$5,489,000	\$15,149,000	\$16,429,000	\$17,223,000	\$20,350,000	\$22,990,000
IN-DIRECT						
Central Facility	1,458,000	5,805,000	5,805,000	5,805,000	5,805,000	6,385,500
Service Zone 1	63,450	63,450	63,450	63,450	495,000	495,000
Service Zone 2	45,000	45,000	45,000	45,000	472,500	472,500
Service Zone 3	124,650	124,650	124,650	124,650	180,000	180,000
Service Zone 4	47,250	47,250	47,250	47,250	472,500	472,500
Service Zone 5	189,000	189,000	765,000	765,000	765,000	765,000
City Nature North	430,200	430,200	430,200	787,500	787,500	787,500
City Nature South	112,500	112,500	112,500	180,000	180,000	787,500
Total	\$2,470,050	\$6,817,050	\$7,393,050	\$7,750,350	\$9,157,500	\$10,345,500
TOTAL						
Central Facility	4,698,000	21,841,464	22,429,551	23,017,638	23,017,638	20,575,500
Service Zone 1	204,450	204,450	204,450	204,450	1,595,000	1,595,000
Service Zone 2	145,000	145,000	145,000	145,000	1,772,500	1,772,500
Service Zone 3	401,650	401,650	401,650	401,650	1,048,000	580,000
Service Zone 4	152,250	152,250	152,250	152,250	1,522,500	1,522,500
Service Zone 5	609,000	609,000	2,465,000	2,465,000	2,465,000	3,401,000
City Nature North	1,386,200	1,386,200	1,386,200	2,537,500	2,537,500	3,401,500
City Nature South	362,500	362,500	362,500	362,500	1,228,000	3,185,500
Total	\$7,959,050	\$25,102,514	\$27,546,601	\$29,285,988	\$35,186,138	\$36,033,500

* Options 1 through 4 do not include operational logistics for any site moves or potential environmental remediation
Portland Parks and Recreation
Feasibility Study for the
Development of Service Zone Facilities

Add \$4 million for relocation and other logistical costs
\$39,186,138

Add \$6 million for relocation and other logistical cost
\$42,033,500
Part A - Executive Summary
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PART B - REPORT

INTRODUCTION

CITY COUNCIL DIRECTIVE

At the conclusion of the Portland City Council's 2006-2007 Fiscal Year budget adoption, the Council included a Budget Note for Portland Parks and Recreation (PP&R) to implement a Maintenance Facility Plan to address the inadequacy of current facilities to meet service delivery needs of the Bureau. The Budget Note states:

The General Fund Contingency will include \$650,000 for the Parks maintenance facility. To be eligible for the funds Parks must submit to the City Council for consideration a final Maintenance Facility Plan showing site acquisition and facility construction requirements..."

----- City of Portland, Oregon - FY 2006-07 Adopted Budget - Budget Notes, Volume 1, Page 66 (repeated page 204)

The Bureau has added concerns for the physical conditions of PP&R's maintenance facilities and the inadequate work environment provided for field staff in the performance of their duties. These issues have been with the Bureau since at least 1998.

In the Portland Parks & Recreation 2020 Vision Refinement Plan for Planning, Improvements and Acquisitions strategy for the 1 to 5 year period of development, the replacement of Mt Tabor Yard is recommended.

----- Parks 2020 Vision Refinement Plan, page 25, October 15, 2003

Portland Parks and Recreation has changed and grown over the years, but many of its maintenance facilities have remained unchanged. Some work sites, including the central yard at Mt. Tabor, lack adequate parking, office space, and storage space for work materials. They do not meet ADA requirements, OSHA, or current building codes for seismic stability, fire and life safety. Restrooms, showers and lockers are often inadequate for the number of employees at a work site. These issues are addressed in greater detail in the Maintenance Facilities Plan, written in 1999.

---- Portland Parks & Recreation, Parks 2020 Vision Appendix, page 44, July 2001

PROJECT TEAM AND GOAL

The Maintenance Facility Plan cited in the Council directive was renamed the "Feasibility Study for the Development of Service Zones Facilities", and led by PP&R's Strategy Finance & Business Development Division. PP&R retained the services of Waterleaf Architecture to research and prepare the report. In addition, the consultant team included GVA Kidder Mathews and Ferrarini & Associates along with Architectural Cost Consultants for their respective real estate, financial, development, management and construction cost estimating expertise. The project's goal was to determine what maintenance / administrative facilities the bureau needs in order to deliver services for the foreseeable future and where such facilities should be located considering the following criteria:

1. Program space needs, real estate, and operational efficiency assessment,
2. Funding strategy, (developed once an Option is adopted by Council) and,
3. Implementation plan (developed once an Option is adopted by Council)

PROJECT OBJECTIVES

The project's objective was to analyze and provide recommendations, taking into consideration current and future PP&R facility operational use and needs; implications of land-use; implications of vehicular access and impact on neighborhoods; and the ability of PP&R to deliver its maintenance services efficiently. This was accomplished through the following steps:

1. Define current and future maintenance facilities space program needs out to the year 2020.
2. Identify and evaluate potential facility location and configurations that will support service delivery.
3. Determine and model at least three potential maintenance facility location configuration scenarios taking into consideration factors such as zoning, real estate availability and development costs.
4. Identify and evaluate potential real estate options (purchase, lease, parallel/adjoining sites and others etc).
5. Estimate costs associated for each potential location & configuration scenario.
6. Develop funding strategy and implementation plan.
7. Report to Council in October on a preferred scenario(s) for the provision of zone maintenance facilities.

APPROACH AND METHODOLOGY

The PP&R Project Team and Senior Management assembled and held a broad-based discussion to review the project scope and objectives taking into account past experience with facility development. The consultant selection process and scope was presented, discussed and then put into action. Consultant team(s) were solicited through a "Request for Proposals" (RFP) process. After a review of RFP submittals, the consultant team, headed by Waterleaf Architecture, was selected, a contract executed and a Notice to Proceed issued by PP&R.

Meetings: An initial partnering meeting was held between the PP&R staff and the consulting team to clarify project scope, schedule, objective, deliverables and obtain priority direction from PP&R staff. Budget and schedule were reviewed and confirmed at a subsequent meeting. Weekly meetings were conducted to monitor progress, share information and data, and schedule tasks for the following weeks to adhere to the overall project timeline.

Site Visits: Visits were conducted at each of the City's current facilities. Interviews with the Zone Managers, City Nature North and South Managers and their key staff helped develop an understanding of current practices, space/operational needs, and suggestions for future considerations. The existing facilities were reviewed for their physical condition, functionality, general code compliance, and location relative to service area. The project team also made a site visit to the PDOT/BOM Maintenance Facility on NE Kirby and Stanton to gain an insight into their operations and working configurations.

Data Collection: Parks and Recreation provided a number of documents, charts and maps to start the work. These included Bureau and Zones Organization Charts, and the following publications:

- January 2004 WBGS "Central Maintenance Facility Feasibility Study of Holgate Site"
- January 18, 2002 Richard Brown "Site Analysis and Master Plan for Urban Forestry"
- June 1999 Portland Parks & Recreation "Maintenance Facilities Plan"
- November 1993 Portland Parks & Recreation "Facilities Assessment Summary"
- September 2006 MS 2000 Zone Facilities Operational Mapping "Center of the Universe" analysis.

As part of the "PP&R Systems Plan" (in process) a series of GIS data based "Parks Sufficiency" maps were produced that indicated current and future planned park development to gauge public and park system needs. For the purposes of the facility study, these maps also indicated future operational considerations for service delivery.

The review of the Parks Sufficiency models were supplemented with a consideration of the properties under consideration for the PP&R system should METRO's Bond Measure for Natural Areas and Streams achieve voter approval in November 2006. This analysis, combined with the Parks Sufficiency model presented a more comprehensive model of where the park system will grow in the foreseeable future

Finally, PP&R staff and the consultant met with John Osborn, the Oregon Director of the Bi-State "Columbia River Crossing" project. This meeting addressed the possible implications of the planned new bridge over the Columbia River on the City Nature North and Urban Forestry, located at East Delta Park. According to Mr. Osborn it is difficult to know the potential impacts with 12 options currently on the drawing board. However, "the Delta site may make a good staging area for construction or wetland mitigation site". In either case, he did not advise that PP&R invest any funds or vest any thought that this may be a good continued operations site.

Programming: Separate space program spreadsheets were developed for each entity within the Central Facility and each Service Zone. These program forms itemize each type of space and denote the existing space as of 2006 and the project space requirements for 2020. It also denotes the number of projected staff needs for FY2020.

ORGANIZATIONAL INFORMATION

GENERAL

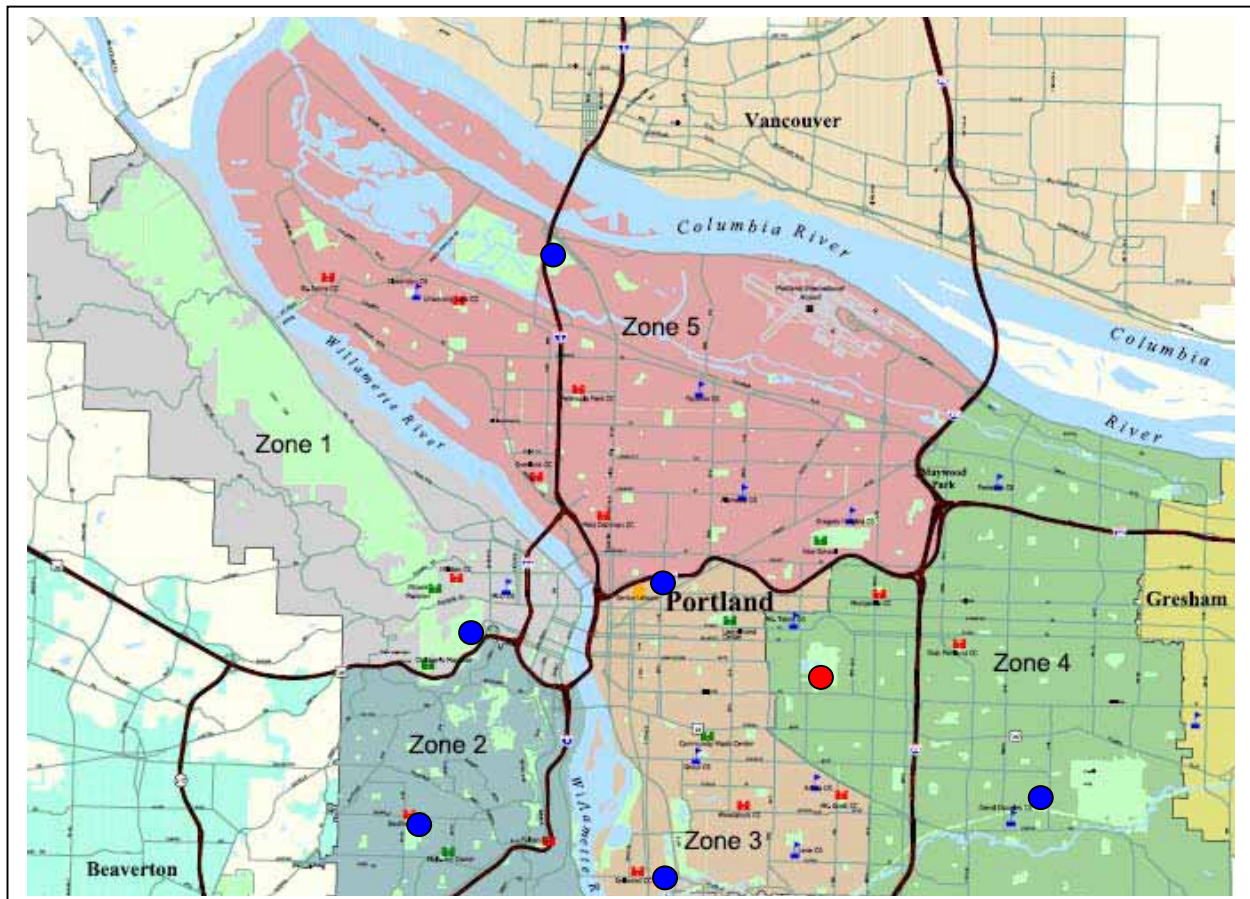
Portland Parks & Recreation currently conducts parks maintenance functions in various satellite locations throughout the city. These facilities are functionally-outdated, inadequate, building-code and OSHA non-compliant, including its Central Facility at Mt Tabor Yard in inner southeast Portland. Further, the facilities are also not always located in a reasonable position to provide efficient service delivery.

These facilities house the five Service Zones, two City Nature Zones which includes Urban Forestry, Horticultural Services, and other specialty functions. In total, they are located in twelve different locations and comprise approximately 140,000 gross square feet of office and service space for staff. This number does not include the extensive maintenance shop spaces. The goal of this project is to create a feasibility study that provides the most cost effective and efficient use of land, buildings and staff time in the performance of their duties in service delivery.

SERVICE ZONES

There are five (5) service zones currently in operation. However, there are currently six (6) Service Zone shops. Service Zones are charged with maintenance of City-owned community centers and parks. They are geographically referred to as the Northwest (Zone 1), Southwest (Zone 2), South (Zone 3), Southeast (Zone 4), and North (Zone 5). Refer to the following map.

City Map with Service Zones



● Current Service Zone Shops ● Current Central Facility

CITY NATURE

This entity is divided into two (2) Zones which provide services across the Service Zone boundaries. City Nature North is currently located at East Delta Park. It includes Urban Forestry and is responsible for taking care of the trees in the public right-of-way throughout the City. East Delta Park also has a “modular building” housing the portion of City Nature South responsible for tree permitting. The remainder of City Nature South is housed in facilities at Mount Tabor and in a “modular building” at McLoughlin. Both City Nature North and City Nature South are responsible for developing and maintaining the trails in the urban environment and in their respective zones.

DESCRIPTION OF EXISTING FACILITIES

Services are now provided from eight (8) different shop locations around the Portland area. Consolidation to fewer sites offers efficiencies in management, operations, and energy costs. These sites and their current and proposed square footage area are noted in the following table.

Physical Constraints of Existing Facilities				
Existing Facility	Current Site Area	Proposed Site Area	Difference	Footnotes
Central Facility	292,300 SF	352,800 SF	+60,500 SF	2
Service Zone 1 – Washington Park	43,600 SF	62,400 SF	+18,800 SF	1
Service Zone 2 – Gabriel Park	28,400 SF	44,600 SF	+16,200 SF	1
Service Zone 3 – McLoughlin Boulevard	52,800 SF	65,300 SF	+12,500 SF	3
Service Zone 4 – SE 136 th Avenue	24,900 SF	57,700 SF	+32,800 SF	4
Service Zone 5 / North – East Delta Park	25,300 SF	77,400 SF	+19,900 SF	5
Service Zone 5 / South – NE 21 st Avenue	32,200 SF	(Combined)		6
City Nature / North	52,700 SF	63,100 SF	+10,400 SF	7
City Nature / South	49,300 SF	66,700 SF	+17,400 SF	7
Footnotes: (1) Facility is part of existing park land. Expansion is possible without land acquisition. (2) Includes 15% increase in site for storm water management features. (3) Material bins are currently located off-site. (4) Adjacent to the current site area noted, there is another 86,253 SF owned by Parks. (5) Current site is adjacent to I-5. Portions of that site may be utilized for new bridge access. (6) This site is too small for any of the Service Zones or City Nature Zones. (7) Because City Nature North and City Nature South currently operate from Service Zone Shops and have shared space, the exact current areas are unknown.				

CENTRAL FACILITY – MT. TABOR

This site houses the city-wide support functions for the Service Zones and a portion of City Nature South. The photo to the right is an example of the “very poor” to “poor” condition of the facility. Should Mt Tabor Yard remain at its current site, it could be combined with possibly City Nature South. If the Yard moves to a new site, an ideal consideration would be the Central Facility combined with Service Zone 5 and/or City Nature North. This assumes that a large site (12 -15 acres) were available in an appropriate area of the city. From investigation, there is a limited number of these sites.



SERVICE ZONE 1 – WASHINGTON PARK

This site, shown to the left, is part of Washington Park and is owned by PP&R. The current metal building was built in 1996 and is in “good” condition. As shown on the “Center of the Work / Zone 1” (Appendix, Page 2), this site is conveniently located and the proposed program growth can be met utilizing the existing property. Therefore, it should logically remain at Washington Park.

SERVICE ZONE 2 – GABRIEL PARK

The site is owned by PP&R. The site and building are too small for the functional program requirements. Due to the physical conditions of the building, it should be demolished. As shown on the “Center of the Work / Zone 2” (Appendix, Page 3), this existing site is also conveniently located. The proposed program growth can be met either by utilizing the existing vacant land or by the addition of an adjacent property. Therefore, it should logically remain at Gabriel Park.



SERVICE ZONE 3 – McLOUGHLIN BLVD

The facility is at the southern edge of the City limits and is not well-located for the service area. Refer to the “Center of Work / Zone 3” (Appendix, Page 4). The facility, which is leased by PP&R, has more than adequate building area, but insufficient site area. Generally, the building is in “standard” condition, except for the east office area, which is in a “below standard” condition. Recently, PP&R leased the remaining portion of the building and will use it for City Nature South. With the additional entity, this insufficient site area will remain. In order to accommodate the future growth either additional land or another site should be investigated.

SERVICE ZONE 4 – SE 136th AVENUE

The site is owned by PP&R. Adjacent to this property is another parcel of land owned by PP&R that could be used for expansion and meet the space needs. Regarding the “Center of Work / Zone 4” (Appendix, Page 5), this site is reasonably located considering the location of future parks in this area of the City. The current building is in “below-standard” condition and is in need of upgrades.

SERVICE ZONE 5 – EAST DELTA PARK (NORTH) AND 21st & PACIFIC STREET (SOUTH)



Zone 5 is split between two sites, a facility at East Delta Park and one at NE 21st Avenue and Pacific Street. Both are owned by PP&R. Neither of these sites are conveniently located per the “Center of Work / Zone 5” (Appendix, Page 6). The building at East Delta Park is in “adequate” physical condition for its age and could be redeveloped to meet future space needs. The building at 21st and Pacific is also in “adequate” physical condition, but unfortunately the site does not meet the needs for parking. Functionally, consolidating these into one facility offers the potential for management efficiencies and reducing redundant building and site spaces.

CITY NATURE NORTH – EAST DELTA PARK

This entity operates out of East Delta Park, which is immediately adjacent Interstate 5 to the west. The century-old barn building is in “below standard” condition and should be demolished and the site redeveloped if this location is to be retained. However, the site is likely to become unusable if a proposed widening of Interstate 5 is pursued to accommodate an expanded Columbia River Crossing. This entity could be combined with Service Zone 5, if a site large enough were available.



CITY NATURE SOUTH – MT. TABOR AND McLOUGHLIN

A portion of City Nature South is based at Mt. Tabor, as well as, at McLoughlin. If the City disposes of the Mt. Tabor site, that portion of City Nature South would need to be relocated. Recently, the leased facilities have increased at the McLoughlin site so that City Nature South will have more space, but not adequate for the proposed program growth. In order to accommodate the future growth either additional land or another site should be investigated.

COMMUNITY GARDENS

This activity is currently a part of the Mount Tabor facility. It oversees the operation of a number of public gardens throughout the City where citizens can arrange to have a plot of land for raising their flowers and vegetables. Community Gardens provides classes in horticulture, and their crews and equipment maintain the common areas of the public gardens. It has been determined that this entity would not continue to be located with the Central Facility. A more central, visible, and public transit accessible location will be found.

PROPERTY

GENERAL

As the City has developed, the number of available properties large enough for a typical service zone of 1.5 to 3-acres (approximately 65,000 to 130,000 SF) has become severely constrained. Due to the increased property valuation within a central city location, the City's ability to purchase such sites is limited. This forces consideration of properties in the vicinity of Gresham or Beaverton. The problem becomes even more severe when looking at locations for a Central Facility which will require at least 8.5-acres and up to 15-acres if combined with a service zone or city nature.

PROPERTY SELECTION

Geographic Location: Using the data compiled from PP&R's MS2000 work force tracking system, the geographic center of the work within each service zone was mathematically determined and the location shown on the “Center of the Work” maps (Appendix, Pages 1 through 6). From the database searches, the few properties that are available are very expensive.

Property Ownership: A review of undeveloped PP&R-owned property was completed within each service zone to determine whether there was any available land that could be utilized. In Service Zone 4, there are several such properties.

Property Accessibility: The ability to safely and efficiently travel to and from the property is an important consideration. The location of the property in relationship to multiple major thoroughfares is paramount, so that the crews can service their zones without being restrained by traffic.

Property Selection Criteria: The order in which the project considered a site is based upon the following:

1. Can the current facility meet future needs with either no or minimal redevelopment?
2. If no, can the current facility meet future needs with complete redevelopment?
3. If no, can current property assets be utilized before purchasing new property?
4. If no, could adjacent zones be centralized or a central facility be used?
5. If no, could new property (owned or leased) with or without structures be used?
6. If no, could new property with structures be used?
7. If no, could new property with built-to-suit be used as last resort?
8. If yes on any of the above, then is public transportation adjacent to the site?

PROPERTY INVESTIGATION

A database search was conducted for all available real estate with or without structures; between two and five acres; east of the Willamette River and west of Interstate 205. Approximately ten properties were found fitting those parameters (Appendix, Page 8). Very few of these were centrally located, and those that were had very high cost per square foot. A similar result was found for properties with five acres and above (Appendix, Page 9). All of available properties were north of Lombard, with the majority located beyond the airport, near Fairview and Gresham.

Background: A key issue for the development of new Central and Service Zone facilities is the availability of adequate property within the City, or the near the boundaries of adjacent cities such as Gresham, Beaverton or Milwaukie. GVA Kidder Mathews (GVA) performed an extensive search for potential sites. These one to five-acre sites would be stand-alone or consolidate facilities. GVA also investigated larger sites of five acres plus for the Central Facility relocation, or the consolidation of a Central Facility and a Service Zone facility. All of the searches were restricted to land already zoned for industrial use.

Methodology: GVA searched for both undeveloped land and properties with existing buildings. In conducting the search, the consultants used real estate programs "CoStar" and "Loopnet", that, when combined, include essentially all commercial real estate listings in the Portland Metro Area. Additionally, the consultants spoke with several of the most successful industrial brokers in the Metro area to insure we included all properties, even those possibly not yet published. In doing so, GVA did find two additional sites that are also included on the attached Site Summary Maps (Appendix, Page 10).

Initially the consultants focused on close-in Eastside, east of Willamette River, west of I-205, north on SE Tacoma St, and south of the Columbia River. From this search what became immediately obvious was that there is almost no industrially zoned property, with or without buildings, in this geographic area that met Portland Parks and Recreation (PP&R) site objectives. GVA found very little property, even after searching properties that were not for sale, but looked like potential underutilized properties that may have redevelopment opportunities. In addition, GVA made inquiries with the Portland Development Commission and the Port of Portland to see if they had any industrial sites available. This inquiry yielded no perspective sites. Further, PP&R also made contact with Portland Public Schools and the Bureau of Environmental Services (BES). These inquiries did yield two potential sites, Whitaker School / Pond site on NE Columbia and the BES site on Swan Island at the base of the inlet.

The consultants expanded their search to include RiverGate and North Portland and included all industrial properties one acre and larger, with and without buildings. The new search parameter extended east of Interstate 205 all the way to and including Troutdale, south of the Columbia River and north of Division. The attached Site Summary Maps (Appendix, Page 11), summarize all property research.

Findings: When visiting each property it became clear that the sites that include existing buildings are not economically viable alternatives, as the existing buildings would be of little value to Portland Parks and Recreation for its purposes. It also became apparent that essentially all the undeveloped land is located east of the Portland International Airport in Northeast Portland, Gresham, Fairview and Troutdale or in the RiverGate area in North Portland.

DEFINITION OF COSTS

LAND COSTS

The available undeveloped industrial sites large enough to accommodate these facilities range in cost from \$5.00/SF to \$9.00/SF. All of these sites were north of Lombard. Generally, the sites with lower cost per square foot were either in the extreme northwest or northeast parts of the City. Since this Feasibility Study has not denoted specific properties, \$9.00/SF cost has been used for the land costs.

CONSTRUCTION COSTS

The costs for this report are based on conceptual drawings. Due to the conceptual nature of these drawings, the construction costs contained herein are considered to be a Class or Level 5 Cost Estimate, as defined by Advancement of Cost Engineering International (ACEI). This level of cost estimating is used for business planning purposes when evaluating alternative options or schemes. The typical accuracy for a Class 5 is within -20% on the low side and +30% on the high side. These construction costs include the general conditions and contractor's profit and overhead.

INDIRECT CONSTRUCTION (SOFT) COSTS

These costs include a 30% increase for the indirect or soft costs that include architectural and engineering fees, plans review fees, special inspections, normal structural testing, hazardous material testing, furniture, and equipment. These costs also include a 15% increase for PP&R's management time to execute these projects. As noted above, these do not include the land costs.

PROJECT COSTS

These combined costs assume a construction start of September 1, 2006. As the actual construction start becomes known these costs must be indexed at the rate of 8% to 10% per year compounded.

SITE / BUILDING DESIGN AND MATERIALS

CONCEPTUAL DRAWINGS

Drawings were prepared to test whether the programmed space requirements can be accommodated on the sites and to identify the areas for the preparation of the construction cost estimates. It is assumed that these building designs would meet or exceed all of the building code and ADA requirements.

BUILDING LONGEVITY

It was determined that the buildings should be constructed of such materials and methods that would produce a building life expectancy of over fifty (50) years.

ENVIRONMENTAL AND ENERGY REQUIREMENTS

Per the City's mandate, new construction would achieve sufficient points for Leadership in Energy and Environmental Design (LEED) "Gold Certification" and remodeled construction would achieve sufficient points for LEED "Silver Certification". Actual Certification may or may not be sought, but incorporation of the design and construction features to achieve certification would be achieved.

OPERATIONAL EFFICIENCIES

GENERAL

Portland Parks and Recreation (PP&R) through Waterleaf Architecture engaged Ferrarini and Associates to determine what impact moving the Mt. Tabor Maintenance Yard (Existing Facility) to a new Central Facility Campus (Planned Facility) would have on PP&R's operating budget. These impacts include an evaluation of the following operating costs: electricity, natural gas, water, sanitary sewer, stormwater, personnel, building maintenance, and capital replacements

The Planned Facility is assumed to be approximately 40% larger than the Existing Facility based on a conceptual design developed by Waterleaf Architecture. The larger facility would provide more space for the Parks' staff and accommodate a staff expansion in the future if and when that becomes necessary.

The Planned Facility is assumed to be built to Leadership in Energy and Environmental Design (LEED) Silver standards, per the City's requirement mentioned above. LEED is a certification program that promotes a whole-building approach to sustainability by recognizing performance in five key areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. This comprehensive approach is the reason that numerous studies have found that LEED-certified buildings reduce operating costs, have healthier and more productive occupants, and conserve natural resources more than buildings built to the minimum code.

Despite being much larger, the Planned Facility is expected to create efficiencies for PP&R in the range of \$918,000 in the first year of operations and approximately \$8.6 million in present dollars over a ten year period. These efficiencies are due to the development of a more efficient building both in terms of worker productivity and energy and water efficiency.

The following table compares the operating costs in the Existing Facility to the Planned Facility in the first year of the analysis (2005). As illustrated, the largest "savings" are in the personnel category. These savings largely reflect the increased efficiencies that are expected to accrue if staff occupies a building specifically designed for their function. Currently the Existing Facility is not efficient because staff and equipment are spread out over a large campus that has expanded without the benefit of a master plan.

Difference in Annual Operating Costs				
	Existing Facility (54,400 sq/ft)	Planned Facility (76,417 sq/ft)	Dollar Change	Percentage Change
Electricity	\$21,987	\$27,828	\$5,841	27%
Natural Gas	\$33,649	\$33,087	(\$562)	-2%
Water	\$1,867	\$1,836	(\$31)	-2%
Sanitary Sewer	\$5,674	\$5,580	(\$95)	-2%
Stormwater	\$14,065	\$12,843	(\$1,223)	-9%
Personnel Costs (payroll)	\$8,736,000	\$8,736,000	\$0	0%
Personnel Efficiency Gain	\$0	(\$960,960)	(\$960,960)	N/A
Lifecycle Maintenance	\$222,660	\$312,774	\$90,114	40%
Capital Replacement	\$51,578	\$0	(\$51,578)	N/A
Total Cost	\$9,087,481	\$8,168,988	(\$918,493)	-10%

Source: PP&R and Ferrarini & Associates

CENTRAL FACILITY (MT. TABOR OPERATIONAL COSTS)

Portland Parks and Recreation (PP&R) and Waterleaf Architecture engaged Ferrarini and Associates to determine the impact of moving the Mt. Tabor Maintenance Yard (Existing Facility) to a new Central Facility Campus (Planned Facility) would have on PP&R's operating budget. These impacts include an evaluation of the following operating costs:

1. Electricity
2. Natural Gas
3. Water
4. Sanitary Sewer
5. Stormwater
6. Personnel
7. Building Maintenance and
8. Capital Replacements

The Planned Facility is assumed to be approximately 40% larger than the Existing Facility based on a conceptual design developed by Waterleaf Architecture. The larger facility would provide more space for the existing Parks staff and accommodate a staff expansion in the future if and when that becomes necessary.

The Planned Facility is assumed to be built to Leadership in Energy and Environmental Design (LEED) Silver standards. LEED is a certification program that promotes a whole-building approach to sustainability by recognizing performance in five key areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Numerous studies have found that this comprehensive approach reduces operating costs, leads to healthier and more productive occupants, and conserves natural resources more than buildings built to code.^{1,2}

KEY FINDINGS AND CONCLUSIONS

Despite being much larger, the Planned Facility is expected to save the Parks Department more than \$918,000 in the first year of operations and approximately \$8.6 million in present dollars over a ten year period.⁴ These savings are due to the development of a more efficient building both in terms of worker productivity and energy and water efficiency.

The "Difference in Operating Cost" Table on Page 9 compares the operating costs in the Existing Facility to the Planned Facility in the first year of the analysis (2005). As illustrated, the largest "savings" are in the personnel category. These savings largely reflect the increased efficiencies that are expected to accrue if staff occupies a building specifically designed for their function. Currently the Existing Facility is not efficient because staff and equipment are spread out over a large campus that has expanded without the benefit of a master plan.

It is important to note, however, that the personnel or labor-related efficiency gains do not imply there will be a reduction in number of employees at the Planned Facility. In reality, the efficiency gains would allow the existing maintenance staff to complete more maintenance throughout the Parks System because there will be less time wasted traversing the campus to complete routine tasks. This increase in efficiency would be equivalent to adding 8-FTEs with no added increase in personnel costs.

METHODS AND ASSUMPTIONS

Current operating costs for the Central Facility are based on actual costs provided by PP&R. The assumptions and data used to estimate current and future operating costs for the Planned Facility are explained below.

Electricity and Natural Gas: According to interviews with local building energy modeling experts, new facilities built to LEED Silver standards typically result in a 20% to 50% more efficient use of electricity and a 20% to 40% more efficient use of natural gas compared to conventional new construction.

A recent survey of over 60 LEED certified buildings, conducted by the State of Massachusetts' Technology Collaborative, supported these conclusions by finding an average energy efficiency gain of 30%.⁵ Additionally, a post-occupancy survey of approximately 30 LEED buildings, conducted by the Cascadia Chapter of the U.S. Green Building Council, found an energy efficiency gain of 40% compared to buildings built to code.⁶

¹ Turner, Cathy. "LEED Building Performance in the Cascadia Region: A Post Occupancy Evaluation Report". Cascadia Region Green Building Council, January 2006

² Kats, Gregory H. "Green Building Costs and Financial Benefits". Massachusetts Technology Collaborative, 2003

³ The base year for this study is 2005 because it is the last full year for which operating cost data were available.

⁴ Reflects the Net Present Value (NPV) of operating cost savings over the next ten years, using a 5% discount rate. All values are expressed in 2005 dollars.

⁵ Kats, Gregory H. Massachusetts Technology Collaborative, 2003

⁶ Turner, Cathy. January, 2006

Based on the above data, the Planned Facility is conservatively expected to use 30% less electricity and natural gas per square foot than the Existing Facility. This estimate is conservative because the information discussed above compares electrical and gas consumption for a LEED certified building to another new building built to code. However this analysis compares the efficiencies associated with the Existing Facility, which is 70 years old and uninsulated, to a new LEED building. As such, the resulting difference in energy consumption would be expected to be much larger.

It is important to also note that the electrical savings used in this analysis only applies to one-third of the Planned Facility's total electricity use. The remaining two-thirds of the electricity would be consumed by building equipment (i.e. computers, appliances, etc.) which are unaffected by the building in which they are located.

Future energy costs are assumed to increase at rates forecasted by the U.S. Energy Information Administration (USEIA) – 2.7% annually for electricity and 5.7% annually for natural gas.⁷

Water and Sanitary Sewer: Based on Waterleaf Architecture's expected use of water conservation systems, water efficient fixtures, rainwater reuse systems, and grey-water irrigation, the Planned Facility will use 30% less water than the Existing Facility to complete the same tasks. Since sanitary sewer charges are largely a function of water consumption, this costs is also expected to decrease by 30%. Future rate increases for both water and sanitary sewer are based on historic data.^{8 9} Water rates are assumed to increase at a nominal 1.4% annually for the forecast period. However, sewer rates are expected to increase at a faster rate (4.2% annually) because of several capital improvement projects currently being implemented by the City.

Stormwater: The Planned Facility will include bioswales and other on-site stormwater infiltration and retention facilities as required by the Bureau of Environmental Services. It will therefore qualify for a stormwater sewer rate that is 35% less than the Existing Facility which lacks these on-site water management systems.

Future stormwater sewer rates are expected to increase at 4.6% annually over the forecast period. This rate is approximately half of the historic rate, which was driven up by many large capital improvement projects. The rate of capital improvement expenditures is not expected to continue at the same pace in the future.¹⁰

Personnel: Interviews with PP&R staff and a review of green building literature found that development of the Planned Facility would enable staff to operate 11% more efficiently than the Existing Facility. There are two factors that comprise this efficiency gain:

- a. The site layout of the Existing Facility is poorly organized from a workflow perspective. Staff currently have to traverse the maintenance yard several times to collect supplies before starting tasks. This is a result of ad-hoc site layout that has occurred over more than 70 years of operations. The space layout of the Planned Facility would group shop and storage space logically to improve work flow, thereby resulting in greater staff productivity. It was estimated that staff would save about 10% of their time in completing tasks if the Planned Facility is constructed.
- b. Several studies have suggested that LEED buildings generate greater staff efficiency. This is the result of superior lighting conditions that improve visual perception, and better indoor air quality that reduces sick leave. While the worker productivity benefits of LEED are hard to quantify, the Massachusetts Technology Collaborative indicates that a 1% productivity factor is reasonable.¹¹

For the purposes of this analysis, the 11% efficiency gain is applied to the Existing Facility payroll to establish the monetary value of the expected productivity gain. However, this calculation was made only for the purposes of completing this analysis. PP&R does not intend to reduce staff if the Central Facility is moved.

To quantify the value of the 11% productivity gain in future years, staff levels are assumed to remain constant while wages are assumed to increase at the rate of inflation.

⁷ U.S. Energy Information Administration. "Energy Price Forecast", January 2006

⁸ Per Portland Water Bureau, water rates are increasing at a rate lower than inflation.

⁹ Portland Bureau of Environmental Services, 2006

¹⁰ Portland Bureau of Environmental Services, 2006

¹¹ Kats, Gregory H. 2003

Life Cycle Maintenance: Lifecycle maintenance costs are minor building repairs that must be undertaken regularly (i.e. light-bulb replacements, minor plumbing, HVAC system adjustments, etc.). These repairs generally cost less than \$15,000.

Maintenance costs for the Existing Facility are based on actual expenditures from 2002 to 2004. These expenditures are equivalent to 2.5% of the Existing Facility's replacement value.^{12,13} However, this has been inadequate to maintain the existing facility. Therefore, the budget at the Existing Facility is assumed to increase incrementally to 3.5% by the end of the ten year forecast period. This rate is more consistent with industry standards for maintenance of older buildings, which usually falls from 3% to 4%.

Maintenance spending at the Planned Facility is held constant at 2.5% of this facility's replacement value during the ten year forecast period. This rate is appropriate for a new building which would not require as many repairs as an older building. The replacement values for both the Existing and Planned Facilities are expected to increase at the rate of inflation through the forecast period.

Capital Replacement Costs: Capital replacement costs are major repairs that periodically need to be completed, such as elevator replacement, HVAC unit replacement, etc. These costs generally exceed \$15,000.

PP&R staff identified several capital replacement costs that would need to be incurred if the Existing Facility was preserved. They include upgrades to roofing, electrical systems, and utility lines. Replacing these components is estimated to cost \$1.5 million.¹⁴ These costs are amortized over a 30-year period and included in the analysis.

Capital replacement costs are not included in the budget for the Planned Facility because major upgrades would not be required.

POTENTIAL SCENARIOS

SCENARIOS BY SERVICE ZONES

During the analysis phase of the project numerous scenarios were developed and evaluated using the criteria noted under the Selection Criteria and the practical aspects of land availability. The following scenarios were developed from which the different Options (Part A – Executive Summary / Project Options and Consolidations:

Central Facility:

Scenario CF1 (CF): Parks would utilize the current site and implement building life safety issues and energy sustainability work.

Scenario CF1 (CF): Parks would purchase a new site and build a new facility just for the Central Facility functions.

Scenario CF2 (CF + Z5): Similar to Scenario CF1, but this would include both Service Zone 5 and the Central Facility.

Scenario CF3 (CF + Z5 + CNN): Similar to Scenario CF1, but this would include Service Zone 5, City Nature North, and the Central Facility.

Scenario CF4 (CF): Parks would utilize the existing Mt. Tabor site and build a new facility just for the Central Facility functions.

Scenario CF5 (CF + CNS): Similar to Scenario CF1, but this would include City Nature South, as well as the Central Facility.

¹² "MS 2000". Portland Parks and Recreation, September 2006

¹³ Replacement value is estimated at \$160/SF. This is consistent with PP&R's standard accounting procedures and is close to the building cost estimate for the Planned Facility.

¹⁴ Architectural Cost Consultants, 2006

Service Zone 1:

Scenario Z1.1: The current location at Washington Park is centrally located and has sufficient land to accommodate the projected site and space needs.

Service Zone 2:

Scenario Z2.1: The current location at Gabriel Park is centrally located and has sufficient land to accommodate the projected site and space needs. However, to accommodate these needs, existing adjacent open space would be used.

Scenario Z2.2: Rather than utilizing the open space land for the new facility, this Scenario requires acquisition of adjacent property.

Service Zone 3:

Scenario Z3.1 (Z3): Zone 3 is leasing existing site and building space on McLoughlin Boulevard until 2010. If possible, the City should continue and extend the lease of this space.

Scenario Z3.2 (Z3 + CNS): If City Nature South was to be included, additional adjacent land would be required.

Service Zone 4:

Scenario Z4-1 (Z4): This service zone could remain at the existing location and be enlarged by utilizing a portion of the adjacent PP&R property.

Scenario Z4-2 (Z4 + CNS): This is similar to Scenario Z4-1, but City Nature South would be included at the existing site.

Service Zone 5:

Scenario Z5-1 (Z5): Parks would purchase a new site and build a new facility just for Zone 5.

Scenario Z5-2 (Z5 + CNN): Similar to Scenario Z5-1, except City Nature North would be include